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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/780,007	02/17/2004	Kuntal Chowdhury	15927RRUS02U	9570								
21909 CARR LLP 670 FOUNDERS SQUARE 900 JACKSON STREET DALLAS, TX 75202	7590 01/05/2010		<div>EXAMINER</div> <div>KIM, PAUL</div> <table border="1"><thead><tr><th>ART UNIT</th><th>PAPER NUMBER</th></tr></thead><tbody><tr><td colspan="2">2169</td></tr></tbody></table> <table border="1"><thead><tr><th>MAIL DATE</th><th>DELIVERY MODE</th></tr></thead><tbody><tr><td>01/05/2010</td><td>PAPER</td></tr></tbody></table>		ART UNIT	PAPER NUMBER	2169		MAIL DATE	DELIVERY MODE	01/05/2010	PAPER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/780,007

Applicant(s)

CHOWDHURY ET AL.

Examiner

PAUL KIM

Art Unit

2169

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This Office action is responsive to the following communication: Amendment filed on 3 September 2009.
2. Claims 1-6 and 15-20 are pending and present for examination.

Response to Amendment

3. No claims have been amended.
4. No claims have been added.
5. No claims have been cancelled.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-3, 15, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al (U.S. Patent No. 6,970,924, hereinafter referred to as CHU), filed on 23 February 1999, and issued on 29 November 2005, in view of Kelley et al, filed on 31 July 2002, published on 5 February 2004, and issued on 29 May 2007, and in further view of Barth et al (U.S. Patent No. 7,349,894, hereinafter referred to as BARTH), filed on 30 July 2004, claiming provisional priority to 22 March 2000, published on 13 January 2005, and issued on 25 March 2008.
8. **As per independent claims 1 and 15**, CHU, in combination with KELLEY and BARTH, discloses:

A method of determining an Internet Protocol (IP) address of an application server in a serving network, comprising:

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receiving an IP address associated with a device on the network by a wireless mobile device {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address"};

performing a reverse domain name query by the wireless mobile device using the received IP address {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address"};

receiving, by the wireless mobile device, a response to the reverse domain name query comprising the visited serving network domain name {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address returns strings representing host names for links (e.g. 208.218.140.5 may map to inverse-gwl.alter.net)"}, wherein the network is visited by the wireless mobile device and serving the wireless mobile device {See CHU, C3:L14-18, wherein this reads over "Clients 12 can by any type of computer or computing device that connects to a network or server system, be it a local area network (LAN), wide area network (WAN)"};

extracting, by the wireless mobile device, the serving network domain name from the received reverse domain name query {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net' may be situated on the administrative boundary between 'inverse.net' and 'alter.net'" and "[a] central server, such as the server at whois.internic.net, can be queries for the owner of a given IP address. Whois requests return domain names"};

selecting, by the wireless mobile device, an application server name as a function of a service desired by the wireless mobile device {See BARTH, C11:L19-56, wherein this reads over "a server name is constructed dynamically"};

appending, by the wireless mobile device, the extracted serving network domain name to the application server name {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net'"}, thereby generating a domain-specific application server name {See KELLEY, Figure 3; and C7:L31-14, wherein this reads over "the reference . . . may be utilized to dynamically generate a canonical name"};

performing, by the wireless mobile device, a domain name query using the domain-specific application server name {See CHU, C16:L7-32, wherein this reads over "a router with links names 'host1.inverse.net' and 'host2.alter.net' may be situated on the administrative boundary between 'inverse.net' and 'alter.net'" and "[a] central server, such as the server at whois.internic.net, can be queries for the owner of a given IP address. Whois requests return domain names"}; and

receiving, by the wireless mobile device, a response to the domain name query comprising a second IP address {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address returns strings representing host names for links (e.g. 208.218.140.5 may map to inverse-gwl.alter.net)"}, the second IP address identifying an application server in the visited serving network, the application server capable of providing the service desired by the wireless mobile device.

While CHU may fail to expressly disclose the generation of an application server name, BARTH discloses a method wherein the server name is constructed dynamically by the client. Accordingly, the modification of CHU by BARTH would lead to a combination wherein application server name may be

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generated such that it may be appended to a domain name. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by CHU by combining it with the invention disclosed by BARTH.

While CHU may fail to expressly disclose the generation of a domain-specific application server name, KELLEY discloses a method wherein parsed pieces of a reference may be used to dynamically generate a canonical name. Accordingly, the modification of CHU by KELLEY would lead to a combination wherein the derived serving network domain name information may be appended dynamically to generate a domain-specific application server name. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by CHU by combining it with the invention disclosed by KELLEY.

One of ordinary skill in the art would have been motivated to do this modification so that the domain-specific application server name may be used by the domain name query to return an IP address of the application server.

9. **As per dependent claim 2**, CHU, in combination with KELLEY and BARTH, discloses:

The method of claim 1, wherein the receiving an IP address comprises receiving an IP address for the UE {See CHU, C16:L7-32, wherein this reads over "[b]oundary routers" and "each IP address").

10. **As per dependent claim 3**, it would be inherent for the step of receiving an IP address comprised of receiving an IP address associated with a device providing an IP address to the serving network since without the IP address, none of the subsequent steps of the claimed invention would be possible.

11. **As per independent claim 20**, CHU, in combination with KELLEY and BARTH, discloses:

The system of Claim 15, wherein the wireless mobile device is configured to store the second IP address. {See CHU, C16:L7-32, wherein this reads over "[p]erforming a reverse DNS lookup on each IP address returns strings representing host names for links (e.g. 208.218.140.5 may map to inverse-gwl.alter.net)".

12. **Claims 4-6 and 16-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over CHU, in view of KELLEY and BARTH, and in further view of Official Notice.

13. **As per dependent claims 4 and 19**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit an IP address of a gateway to the UE since a gateway is well-known and commonly-used within the art to connect two IP-based networks.

14. **As per dependent claim 5**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to derive information from a Uniform Resource Identifier (URI), since a URI is well-known and commonly-used within the art to identify a resource.

15. **As per dependent claim 6**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the application server be a Proxy Call Session Control Function (P-CSCF) server name since a P-CSCF server is simply another type of application server available.

16. **As per dependent claim 16**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made for the serving network to have a URI since a URI is commonly-used and well-known in the art to be used as an identifier of network resources.

17. **As per dependent claim 17**, CHU, in combination with KELLEY, BARTH, and Official Notice, discloses:

The method of claim 1, wherein the IPD address is the IP address of the wireless mobile device (See CHU, C16:L7-32, wherein this reads over "[b]oundary routers" and "each IP address").

18. **As per dependent claim 18**, it would be inherent for the step of receiving an IP address comprised of receiving an IP address associated with a device providing an IP address to the serving network since without the IP address, none of the subsequent steps of the claimed invention would be possible.

Response to Arguments

19. Applicant's arguments filed 6 March 2009 have been fully considered but they are not persuasive.

a. Rejections under 35 U.S.C. 112

Applicant's arguments, see pages 6 and 7, filed 3 September 2009, with respect to the rejections under 35 U.S.C. 112 have been fully considered and are persuasive. The 35 U.S.C. 112 rejection of claim 17 has been withdrawn.

b. Rejections under 35 U.S.C. 103 in view of Chu, Kelley, and Barth

Applicant's arguments filed 3 September 2009 have been fully considered but they are not persuasive. Applicant asserts the argument that the combination of Chu, Barth, and Kelley would fail to disclose the recited feature of "performing a domain name query using the result of a reverse domain name query." See Amendment, page 7. The Examiner respectfully disagrees. It is noted that Chu discloses a reverse domain name query or "reverse DNS lookup." See Chu, column 16, lines 17-32. Additionally, it is noted that Kelly and Barth both disclose domain name queries. Specifically, Kelley discloses that the web browser resolves the domain name www.jos.ext into a numerical address and Barth discloses the method of mapping host names to an IP address. See Kelly, column 9, lines 24-29 and Barth, column 11, lines 57-66. The additional feature of using a domain name (returned from a reverse DNS query) in a domain name query would allow for the identification of an IP address associated with a specific application server name. That is, it would have been obvious to one of ordinary skill in the art to combine the inventions of Chu, Kelley, and Barth such that a reverse DNS query and a DNS query may be used in conjunction to improve the reverse DNS lookup system of Chu for the predictable result of enabling a forward DNS query upon the domain name such that an application server may be identified by IP address.

Accordingly, for the aforementioned reasons above, the rejections under 35 U.S.C. 103 are maintained.

Conclusion

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL KIM whose telephone number is (571)272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cam Y Truong/
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